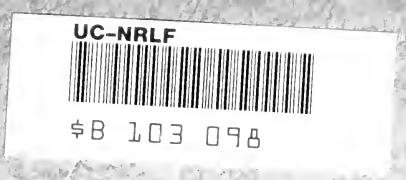

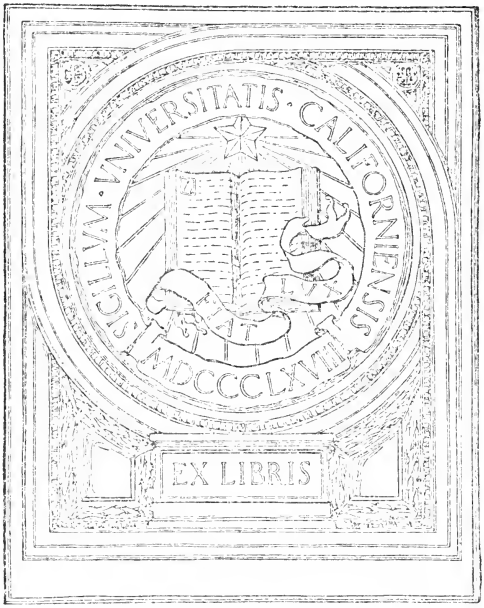
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Seasonable Fruits and Their Uses

PREPARED BY THE

DIVISION OF HOME WELFARE

(SECOND IMPRESSION)

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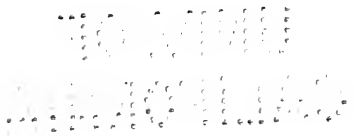
The benefits of education and of useful knowledge, generally diffused through a community, are essential to the preservation of a free government.

Sam Houston.

Cultivated mind is the guardian genius of democracy. . . . It is the only dictator that freemen acknowledge and the only security that freemen desire.

Mirabeau B. Lamar.



SEASONABLE FRUITS AND THEIR USES

APPLES, CRANBERRIES.—DRIED FRUITS—PRUNES, RAISINS, FIGS, DATES.

These lessons, as stated in the previous bulletin, are prepared especially to meet the problems of the rural school where the lack of space, equipment, and adequately trained teacher, and practically no funds, make it impossible to give systematic training in the study and preparation of foods. They are not offered as a substitute for such training; on the contrary, their very limitations will, doubtless, create a demand for better facilities and more definite work. But it is hoped that these lessons will prove an incentive to every school using them, to extend and strengthen the work, so that the country girl may have the same opportunities for definite home training enjoyed by many of the girls in the city today.

If the teacher is really interested in the subject, and prepares the lesson carefully from the suggestions outlined and presents it in an interesting way to the pupils, they will get a general and fairly intelligent knowledge of the source of the best known and most commonly used foods. They should also be able to prepare and serve wholesome and attractive dishes; and, by the knowledge obtained of food values and combinations, be able to assist at home in the preparation and serving of wholesome, nutritious meals. They should also be able to serve a hot nutritious dish at the school noon luncheon at a minimum expenditure of time, labor and money. But above all, if the teacher studies the subject carefully herself, she will be able by careful correlation with related subjects to place the training for home-making in the child's mind on the same educational plane as other courses in the school curriculum. This will do much to help rid the child's mind of the generally prevailing idea that home work is menial, and is to be shirked and avoided as such. On the contrary, systematized knowledge will dignify it and raise it from a mere menial occupation to a dignified profession.

SEASONABLE FRUITS

Fruits are one of our most important and popular foods. During the spring and summer, we have a large variety to choose from. Berries, melons, figs, peaches, pears, and grapes come together, or succeed each other in rapid succession. With the coming of the winter months, however, the varieties become fewer and fewer, until at last we fall back upon the most popular one in the fruit world, the apple. The cranberry, too, is regarded as a staple winter fruit, and the Tranksgiving turkey is never considered complete without its invariable accompaniment of cranberry sauce or jelly.

Dried and evaporated fruits are also popular during the winter months. Probably the most nutritious and the best known of these are the evaporated apples, peaches, apricots, and dried figs, dates, raisins, and prunes. There are numberless ways of serving these fruits—in fact, there is a book entitled "One Hundred Ways of Serving the Apple." A few practical recipes which can be used advantageously in the school and in the home are given in this bulletin.

REFERENCES

Hutcheson, "Food and Dietetics," pp. 253-259.

Fisher & Williams, "Elements of the Theory and Practice of Teaching Cookery," pp. 226-236.

U. S. Department of Agriculture, Farmers' Bulletin 291, "The Evaporation of Apples."

WHAT THE TEACHER SHOULD KNOW

1. How to review the principles of the last lesson.
2. How to relate the new work to the old.

REVIEW OF THE POTATO

Principal food value—starch.

How the best method of cooking was determined, i. e., by finding out the characteristic properties.

Review the tests used in determining properties, i. e.:

1. Grating potato.
2. Liquid containing white sediment—starch.

3. Starch mixed with cold water to see if it would dissolve. Result. Conclusion. Starch will not dissolve in cold water.
4. Starch and water boiled. Result, thick, soft mass; more palatable than raw starch, also more digestible.

All food must be dissolved and reduced to a liquid by the digestive juices before they can nourish the body. Raw starch is not dissolved by the digestive juices. *To make starch digestible it must be thoroughly cooked.*

Cooking softens the woody fiber (review fiber of potato) surrounding the starch grains and releases them so they can be thoroughly cooked and become available for food.

NEW KNOWLEDGE

Potatoes are not the only foods containing starch. All grains have a large amount. The most important grain is wheat because it is used so generally for bread-making. We have only to look at a slice of bread made from this grain to tell that it contains starch.

Some fruits also contain starch, though the majority contain a larger amount of sugar. While starch and sugar do not resemble each other very much in appearance and taste, they have the same use in the body, i. e., furnishing heat and energy.

A simple test for starch is tincture of iodine. Dilute a few drops in cold water, and drop a little of this mixture on any food. If it contains starch the iodine will turn it blue. Have the pupils test potatoes, apples, and any other foods at hand for starch.

Fruits are usually classed under two heads: flavor fruits and food fruits.

Flavor fruits contain more than 80 per cent water. Their principal food is sugar, which varies from five and one-half to ten and one-half according to the fruit and to the mineral salts. The mineral salts make the food particularly valuable, as they are essential in keeping the blood and other parts of the body in a healthful condition. (Apples and cranberries are excellent examples of flavor fruits.)

Food fruits contain more than 20 per cent of solids, and possess considerable nutritive value. The banana is a typical food fruit.

Dried fruits contain a large per cent of sugar. Dried figs have about 50 per cent. They also contain other valuable foods besides sugar. Weight for weight, they contain more nourishment than bread. Prunes, raisins, and dates are among the best known of our dried fruits.

Digestibility of fruits depends largely upon their ripeness. Ripe fruit is much more wholesome and more easily digested than green.

TEACHER'S AIM

1. To teach the value of fruit as a food.
   a. From a nutritive standpoint.
   b. To give variety to the diet.
2. To teach attractive, wholesome, and economical methods of preparing fruits.
3. To emphasize correlation with related subjects.

WHAT THE PUPILS SHOULD KNOW

1. Compare the apple and the potato in size, shape and general appearance. Which is the most attractive? Why? Fruit doesn't benefit the plant as directly as the potato from which the new plant sprouts and draws nourishment. It is meant to serve as a bait to the birds and insects; they are attracted by the bright colors and delicious odors to eat the fruit, and they liberate the seed in so doing. The seed, if they fall on fertile soil, take root and grow, and in this way, nature continues their propagation.

2. a. Grate the apple just as the potato was grated—compare and discuss results.
   b. Put a drop of tincture of iodine on a small piece of potato—note results.
   c. Repeat (b) using the apple instead of potato—compare with (b).
   d. Boil some of the water drained from the apple pulp—compare result with similar experiment made with the potato. Does the apple contain starch?
   e. Taste the raw apple, raw potato—compare flavors. Judging from the taste which food does the apple contain which the potato does not? Sugar. Sugar is the chief food in apples, and with few exceptions all other fruits.

USE OF SUGAR AND STARCH IN THE BODY

Sugar and starch are called fuel foods and have about the same use in the body. They both furnish heat and energy. They have much the same relation to the body that coal has to the engine or gasoline to the automobile. Has the apple any other flavor besides sweetness? It is sour also. The sour taste denotes the presence of acid, so apples are not only sweet but acid as well. The acids are quite as valuable as the sugars, although they do not give heat and energy. They belong to the valuable mineral salts. They help to keep the blood healthful, and have various other uses in the body besides, such as forming of bone and muscle. On examining the apple you find a fiber similar to that of the potato. When the apple is cooked this fiber is softened just as it was in the potato. You know how much softer a baked apple is than a fresh apple. When this fiber is softened, it is much more easily digested. Test cranberries, prunes, and any other dried fruits on hand with iodine. (A number of pupils in the class may be asked to bring a small amount of one of the various fruits mentioned for experimental purposes.) Taste these fruits. How do they compare in sweetness, in moisture? What would be your conclusion as to their composition and their comparative nutrition? Each pupil should be required to write up each of these experiments carefully, and some time during the month should have a written lesson or examination on them.

SUGGESTIVE CORRELATION

1. *Geography.*—Discuss soil and climate adapted to fruit growing, and the principal fruit growing countries. Methods of drying and packing prunes, raisins, figs, etc.
2. *Nature Study.*
    a. Distinction between fruit and vegetables.
    b. Study of birds and insects which help to distribute seeds.
3. *Physiology.*—The digestive organs and the digestion of starch and sugar.
4. *Arithmetic.*
    a. Calculate the amount of water in apples. Method: Weigh fresh apple, cut in slices one-eighth inch in

thickness, arrange slices on trays or clean boards and cover them with net or cheese cloth to protect from flies and other insects. Put the tray in the open sunshine every day on the opposite side from the road to avoid all the dust possible. When thoroughly dried, weigh again.

b. Estimate the per cent of water present in apples.

c. How many pounds of fresh apples would it take to make a pound of dried apples?

d. What would be the cost of a pound of home dried apples? What is the difference in the price between them and the dried apples bought at the store?

5. *Drawing.*—Draw apple from nature and color with crayons.

6. *History.*—Review the apple in history.

a. Sacred history, story of "The Forbidden Fruit."

b. The Roman conquest of the Britons and the introduction by them of the apple into England. Its place in English history.

c. The apple in America.

7. *English.*

a. Note-book work as in potato lesson.

b. Composition on the apple.

c. Story telling, mythological stories, Halloween and other folk-lore tales.

8. *Spelling.*—New words connected with the lesson and their definition.

CONSTRUCTIVE WORK

a. Wooden trays with handles for drying apples, or screened boxes.

b. Making of simple cooking aprons and sleeve protectors.

HISTORY OF THE APPLE

The apple dates back to the very dawn of history. It has been frequently called the "fruit of discord," as so many unhappy disasters in history and legend have been connected with

it. All are familiar with the fall of Adam and Eve, and the apple is usually supposed to have been forbidden fruit. The decision of Paris which brought about the famous Trojan War again brings the apple into history.

The apple is frequently, but wrongly supposed to be a native of England. There was a native variety, but it was small in size, about the size of a small hazel nut and inferior in flavor. The Roman conquerors brought a superior variety with them when they conquered the Britons—they having received it from the Orient. Henry VIII was especially fond of apples, and his gardener cultivated extensive orchards. Many tales are related of his love for the fruit. Shakespeare frequently referred to apples as "pippins." so called because they are raised from the "pip" or seed. Cider seems to have been first made in England, and was for many years a national beverage.

The apples were introduced into New England by the early settlers. It took very kindly to its new home, and its cultivation spread from colony to colony as the country grew. So delicious were the Albermarle pippins of Virginia, their fame spread across the water to the very ears of the king himself, and a yearly tribute of them was exacted for the royal table.

At present, over two thousand varieties are known. The apple enjoys much the same popularity in the fruit world which the potato does in the vegetable world. It stands packing and transportation to great distances, and has splendid keeping qualities. It may be stored for months without deterioration or loss of flavor. It also lends itself to an endless variety of dishes, and for this reason it is particularly valuable to housekeepers. One recipe book, as has been said before, contains over one hundred recipes for using apples.

SOME MYTHS AND LEGENDS OF THE APPLE.

Scandinavian.—The apple was the favorite fruit of the Scandinavian gods, who ate it when they found themselves growing infirm in body and mind.

Greek.—Atlanta was told by a fortune teller that if she ever married it would be her ruin, consequently, she fled from men and devoted all her time to the chase. But the fame of her beauty traveled abroad, and many suitors came to woo her. So

that she might be rid of them, she announced that she would wed the one who could conquer her in a race, but defeat would mean death to the contestant. Despite the hard conditions, many swains entered the contest. Hippomenes was appointed judge of the race, but when he saw how beautiful Atlanta was he decided to enter the contest himself, and appealed to Venus to help him. This she did by giving him three golden apples. The race began and Atlanta soon began to gain upon him. He threw one of the apples in her path and she paused to pick it up. But when she saw he was outdistancing her, she increased her speed and threatened to go ahead of him. Again he threw an apple, and as before, she paused to get it, and he shot ahead. The third time she was abreast of him and he threw the remaining apple off to one side. She hesitated a moment, and then went out of the path to secure it, and this gave Hippomenes such an advantage that he won the race—and a bride.

The Golden Apples of Hesperides.—Hercules was the strongest man the world had ever seen. Notwithstanding, he was obliged to serve his cousin, who set him twelve labors to perform. The most difficult of these labors was to bring the golden apples from the garden of Hesperides. The goddess Juno had received these apples as a present at her marriage, and she had placed them in the care of the daughters of Hesperis, who, with the help of an ever watchful dragon, guarded them eternally.

Hercules did not know where the garden of Hesperides was, and had no idea where to look for it, but he decided to seek help of Atlas, father of the Hesperides maids. After many adventures, he found Atlas standing on the top of a high mountain, his head and shoulders buried in the clouds above, for he was upholding the heavens on his shoulders. This he was compelled to do by the gods as punishment. Hercules explained his mission, and after some discussion, Atlas agreed to go himself for the apples if Hercules would hold up the heavens while he was gone. He consented and after some time Atlas returned with the coveted fruit, but he had enjoyed his freedom so much, he decided to let Hercules continue to support the skies. By a ruse, however, Atlas was again given his burden. Hercules asked him to take the weight for a moment so he could take a more comfortable position. Atlas, all unsuspecting, assumed his accustomed

burden, and Hercules picked up the apples and walked off with them leaving poor Atlas to his endless task. (Find out the other eleven tasks of Hercules.)

RECIPES.

Most of these recipes are planned for six people, but can be increased to any desired proportions.

APPLE SAUCE.

Pare sour apples as for stewing. Put them in a saucepan with enough water to keep them from burning, add one cupful of sugar to six or eight apples. Cook till the apple is soft, stirring or beating to make it smooth. If the apples lack flavor, cook an inch of stick cinnamon or five or six cloves with them.

BAKED APPLES.

Wash and core large, sound, sweet apples; put them into an earthern or enameled-ware baking dish. Put one tablespoonful of brown sugar into each cavity, and pour boiling water into the dish, one-half cupful for each eight apples. Bake until soft, frequently dipping over the apples the syrup that forms in the pan. Serve cold with cream or milk. If the apples are thick-skinned, pare them (after coring, that they may not be broken by knife or corer.) If they lack flavor, add a little lemon juice and cinnamon to the sugar, one teaspoonful of lemon juice and one-fourth teaspoonful of cinnamon to one-fourth cupful of sugar.

SCALLOPED APPLES.

One small baker's stale loaf, one-fourth cup butter, one quart sliced apples, one-fourth cup sugar, one-fourth teaspoon grated nutmeg, grated rind and juice of one-half lemon.

Cut loaf in halves, remove soft part, and crumb by rubbing through a colander; melt butter and stir in lightly with fork; cover bottom of buttered pudding dish with crumbs and spread over one-half the apples sprinkled with one-half of the sugar, nutmeg, lemon juice, and rind mixed together; repeat cover with

remaining crumbs, and bake forty minutes in moderate oven. Cover at first to prevent crumbs browning too rapily. Serve with sugar and cream.

BREAD AND BUTTER APPLE PUDDING.

Cover bottom of a shallow baking dish with apple sauce. Cut stale bread in one-third inch slices, spread with softened butter, remove crusts, and cut in triangular pieces; then arrange closely together over apple. Sprinkle generously with sugar, to which is added a few drops of vanilla. Bake in a moderate oven and serve with cream.

APPLE TAPIOCA.

Three-fourths cup pearl or Minute tapioca, cold water, two and one-half cups boiling water, one-half teaspoon salt, seven sour apples, one-half cup sugar.

Soak tapioca one hour in cold water to cover, drain, add boiling water and salt; cook in double-boiler until transparent. Core and pare apples, arrange in buttered pudding dish, fill cavities with sugar, pour over tapioca, and bake in moderate oven until apples are soft. Serve with sugar and cream or cream sauce. Minute tapioca requires no soaking.

CRANBERRY SAUCE.

Wash and pick over the cranberries and be careful to remove all stems. Measure the berries and place them in a graniteware saucepan with one-half as much sugar and one-fourth as much water as you have berries. Let them come to a boil and afterward boil ten minutes, covered, if possible, and with only sufficient stirring to prevent boiling over. Strain, cool and serve. They may also be served without straining, if preferred.

Cranberry jelly may be made in the same way and strained through double cheese cloth. It is better, however, to strain the juice before adding the sugar, then to boil the juice and add the sugar, as in ordinary jelly making. Any good cranberry sauce will usually form into a jelly on cooling.

(Let the pupil explain why a graniteware saucepan should be used and why fruit should be stirred with a wooden or silver spoon.)

The preparation of dried fruits may be illustrated by the cooking of stewed prunes or apricots, which are very similarly prepared. Do not add too much sugar. Why is it impossible to give definite directions for the amount of sugar?

STEWED PRUNES.

Wash the prunes with care and let them soak in fresh, clean water for several hours. Cook them in this water until nearly tender, then add a little sugar. Cook again until the prunes have absorbed the sugar and are entirely tender, then cool and serve. A slice of lemon may be cooked with them, if desired.

STEWED APRICOTS.

Wash the apricots carefully and let them soak in fresh water until they are tender. Cook them in the same water in which they have been soaked. Cook them gently for a long time, as it brings out the flavor better. When nearly done, taste and add sugar as may be needed. (Use about two tablespoonfuls to one pint of apricots.) Cook until the sugar has been dissolved and the apricots are entirely tender.

If the sugar is cooked with the fruit from the beginning, it tends to make the fruit tough. Why cook prunes or apricots in the water in which they were soaked?

Apples are one of the most abundant fruits and are, perhaps on that account, scarcely appreciated. Baked, in earthenware or graniteware dishes, with the cores removed, they are a dish fit for a king. They may be cooked similarly in a saucepan, where the process may be watched.

NORWEGIAN PRUNE PUDDING.

One-half pound prunes, two cups cold water, one cup sugar, one inch piece stick cinnamon, one and one-half cups boiling water, one-third cup corn starch, one tablespoon lemon juice.

Pick over and wash prunes, then soak one hour in cold water, and boil until tender; remove stones, obtain meat from stones and add to prunes; then add sugar, cinnamon, boiling water, and

simmer ten minutes. Dilute corn starch with enough cold water to pour easily, add to prune mixture, and cook five minutes; remove cinnamon, mould, then chill, and serve with cream.

BAKED BANANAS.

1. Choose sound ripe bananas; cut about three-fourths of an inch off of each end, and bake in an earthern or enamel-ware baking dish for thirty minutes. Slit open the skin, and eat the banana, which should be sweet and juicy, with a fork or spoon.

2. Remove bananas from skins, lay in a baking dish, sprinkle with granulated sugar, and pour a little cold water into the dish. Bake in a hot oven until tender. Serve for breakfast, or with lemon sauce for dessert.

STEAMED CRANBERRY PUDDING.

One-half cup butter, one cup sugar, three eggs, three and one-half cups flour, one and one-fourth tablespoons baking powder, one-half cup milk.

Cream the butter, add sugar gradually, and eggs well beaten; mix and sift flour and baking powder and add alternately with milk to first mixture, stir in berries, turn into buttered mould, cover, and steam three hours. Serve with thin cream, sweetened and flavored with nutmeg.

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